



COMMONWEALTH of VIRGINIA

Doug Domenech
Secretary of Natural Resources

DEPARTMENT OF ENVIRONMENTAL QUALITY

TIDEWATER REGIONAL OFFICE

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David K. Paylor
Director

Maria R. Nold
Regional Director

Permit No: VA0081248
Effective Date: January 17, 2012
Modification Date: July 9, 2013
Expiration Date: January 16, 2017

AUTHORIZATION TO DISCHARGE UNDER THE
VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM

AND


THE VIRGINIA STATE WATER CONTROL LAW

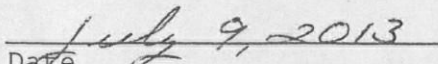
In compliance with the provisions of the Clean Water Act as amended and pursuant to the State Water Control Law and regulations adopted pursuant thereto, the following owner is authorized to discharge in accordance with the information submitted with the permit application, and with this permit cover page, and Parts I and II of this permit, as set forth herein.

Owner: Hampton Roads Sanitation District
Facility Name: HRSD-Atlantic STP
City: Virginia Beach
County: N/A
Facility Location: 645 Firefall Drive, Virginia Beach, VA 23454

The owner is authorized to discharge to the following receiving stream:

Stream: See Attachment I
River Basin:
River Subbasin:
Section:
Class:
Special Standards:


Maria R. Nold


Date

Attachment I

Outfall Nos.

Receiving Stream

001

Atlantic Ocean
Basin:

Chesapeake Bay, Atlantic
Ocean and Small Coastal

Subbasin:

N/A

Section:

1

Class:

I

Special Standards: a

002 - 009, 011,
012, 014, 016, 017

Lake Tecumseh

Basin:

Chowan & Dismal Swamp

Subbasin:

Albermale

Section:

1

Class:

II

Special Standards: None

PART I

A. FINAL LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from outfall: 001

Such discharges shall be limited and monitored by the permittee as specified below:

<u>EFFLUENT CHARACTERISTICS</u>		<u>DISCHARGE LIMITATIONS</u>				<u>MONITORING REQUIREMENTS</u>	
		<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Minimum</u>	<u>Maximum</u>	<u>Frequency</u>	<u>Sample Type</u>
Flow (MGD) [a]		NL	NA	NA	NL	Continuous	TI&RE
pH (S.U.)		NA	NA	6.0	9.0	1/Day	Grab
BOD ₅ (mg/l; kg/d) [c]	30	6132	45 9198	NA	NA	3/Week	24-Hr. Comp.
Total Suspended Solids (TSS) (mg/l; kg/d) [c]	30	6132	45 9198	NA	NA	3/Week	24-Hr. Comp.
Total Residual Chlorine (TRC) (mg/l) [b] [c]		2.5	4.0	NA	NA	1/2 Hours	Grab
Fecal Coliform (N/CML) [d]		200	NA	NA	NA	1/Week (Between 10 AM & 4 PM)	Grab
Enterococci (N/CML) [e]		35	NA	NA	NA	2/Month (Between 10 AM & 4 PM)	Grab

NA = Not Applicable.

NL = No limitation, however, reporting is required.

TI&RE = Totalizing, Indicating, Recording Equipment

Upon issuance of the permit, Discharge Monitoring Reports (DMRs) shall be submitted to the regional office at the frequency required by the permit regardless of whether an actual discharge occurs. In the event that there is no discharge for the monitoring period, then "no discharge" shall be reported on the DMR.

[a] The design flow of this treatment facility is 54 MGD. See Part I.C.5 for additional flow requirements.

[b] See Part I.B. for additional chlorine monitoring instructions.

[c] See Parts I.C.6. and I.C.7. for quantification levels and reporting requirements, respectively.

[d] Fecal Coliform monthly average is calculated as a geometric mean.

[e] Enterococci monthly average is calculated as a geometric mean. Samples must be taken at least 7 days apart.

2. There shall be no discharge of floating solids or visible foam in other than trace amounts.

3. At least 85% removal for BOD and TSS must be attained for this effluent.

PART I

A. LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from outfall(s): 002 - 009, 011, 012, 014, 016, 017 (storm water runoff)

Such discharges shall be limited and monitored by the permittee as specified below:

THESE OUTFALLS SHALL CONTAIN ONLY STORM WATER RUNOFF ASSOCIATED WITH A REGULATED INDUSTRIAL ACTIVITY WHERE NO MONITORING IS REQUIRED. THERE SHALL BE NO DISCHARGE OF PROCESS WASTEWATER FROM THESE OUTFALLS.

2. There shall be no discharge of floating solids or visible foam in other than trace amounts.

A. LIMITATIONS AND MONITORING REQUIREMENTS - BIOSOLIDS

1. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to manage biosolids according to the approved Sludge Management Plan. The pollutants in biosolids shall be limited and monitored by the permittee as specified below:

a. Annual Biosolids Production Data

Report annual total amount of biosolids produced, in dry metric tons, including units and annual amount of biosolids used or disposed in various methods (if applicable).

b. Chemical Pollutant Limitations

BIOSOLIDS PARAMETERS	LIMITATIONS		MONITORING REQUIREMENTS	
	Monthly Average (mg/kg)*	Ceiling Concentration Maximum (mg/kg)*	Frequency	Sample Type
Percent Solids	NL	NA	1/2 Months	Composite
Total Arsenic**	41	75	1/2 Months	Composite
Total Cadmium**	39	85	1/2 Months	Composite
Total Copper**	1,500	4,300	1/2 Months	Composite
Total Lead**	300	840	1/2 Months	Composite
Total Mercury**	17	57	1/2 Months	Composite
Total Molybdenum**	NA	75	1/2 Months	Composite
Total Nickel**	420	420	1/2 Months	Composite
Total Selenium**	100	100	1/2 Months	Composite
Total Zinc**	2,800	7,500	1/2 Months	Composite

A. LIMITATIONS AND MONITORING REQUIREMENTS - BIOSOLIDS (cont.)

1. Chemical Pollutant Limitations

BIOSOLIDS PARAMETERS	LIMITATIONS	MONITORING REQUIREMENTS	
		Frequency	Sample Type
TKN (mg/kg)	NL	1/2 Months	Composite
Ammonia Nitrogen (mg/kg)	NL	1/2 Months	Composite
Nitrate Nitrogen (mg/kg)	NL	1/2 Months	Composite
Total P (mg/kg)	NL	1/2 Months	Composite
Total K (mg/kg)	NL	1/2 Months	Composite
pH (Std Units at 25° C)	NL	1/2 Months	Composite
Alkalinity as CaCO ₃ , (%)**	NL	1/2 Months	Composite
PAN (lbs/DT)	NL	1/2 Months	Calculated

NL = No limitation, monitoring required

* = Dry weight basis, unless otherwise stated

** = Constituents subject to cumulative pollutant loading rates (CPLR), pollutant concentrations (PC) and ceiling limits. (PC biosolids contain the constituents identified above with ** at concentrations below the monthly average specified in Part I.A. If the concentration of any of these constituents in biosolids from any source exceeds the monthly average concentration, then the biosolids from the source are subject to CPLR rules and tracking and a permit modification is required.

*** = Lime treated biosolids (10% or more CaCO₃ by dry weight) should be analyzed for percent Calcium Carbonate Equivalence (CCE).

- c. Pathogen Reduction Limitations: Biosolids land applied in Virginia shall comply with one of the applicable Class B pathogen reduction alternatives specified in 9 VAC 25-31-710.B. The permittee shall identify the alternative used in the annual report and provide the data that demonstrate compliance with the applicable alternative.

For example: Class B, Alternative 1, fecal coliform less than either 2,000,000 MPN/g or 2,000,000 CFU/g; or Class B, Alternative 2, anaerobic digestion - Sewage sludge shall be treated in the absence of air for a specific mean cell residence time at a specific temperature. Values for the mean cell residence time and temperature shall be between 15 days at 35 to 55 degrees Celsius and 60 days at 20 degrees Celsius.

- d. Vector Attraction Reduction Limitations: Biosolids land applied in Virginia shall comply with one of the applicable vector attraction reduction alternatives specified in 9 VAC 25-31-720.B. The permittee shall identify the alternative used in the annual report and provide the data that demonstrate compliance with the applicable alternative.
- e. The results of the biosolids monitoring specified above shall be included in the annual report (Part I.D.25). The report shall include a certification statement signed in accordance with Part II.K.
- f. Monthly average shall be reported as the average of the results of all samples collected within a calendar month and analyzed using an approved method, in accordance with Part II.A. of this permit. For monitoring periods which include multiple months, if one sample is collected during the monitoring period, that result shall be reported as the monthly average. If samples are collected in different months during the monitoring period, each monthly average shall be calculated and the highest monthly average reported. Individual results and calculations shall be submitted with the report.
- g. The maximum concentration shall be reported as the highest single result from sampling during a monitoring period. If the concentration of any single sample of biosolids exceeds the Ceiling Limit for any parameter, the biosolids shall not be land applied.
- h. All samples shall be collected and analyzed in accordance with Title 40 Code of Federal Regulations Parts 503 and 136.

A. LIMITATIONS AND MONITORING REQUIREMENTS - SOILS

1. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to manage sewage sludge according to the approved Sludge Management Plan. The pollutants in biosolids shall be limited and monitored by the permittee as specified below:

SOILS PARAMETERS	LIMITATIONS	MONITORING REQUIREMENTS(**)	
		Frequency	Sample Type
Soil pH (Std units)	NL	1/Application*	Composite
Cation Exchange Capacity (meq/100g)	NL	1/Application	Composite
Available Phosphorus (mg/kg)	NL	1/Application	Composite
Exchangeable Potassium (mg/kg)	NL	1/Application	Composite
Exchangeable Magnesium (mg/kg)	NL	1/Application	Composite

NL = No limitation, monitoring required

* For biosolids with a cadmium concentration greater than or equal to 21 mg/kg the soil pH sample must be less than 1 year old; refer to Part I.D.19.

** Soil samples shall be collected and analyzed no more than 3 years prior to the biosolids application.

- Samples taken in compliance with the monitoring requirements specified above shall be taken at the following locations:
All land application sites before biosolids is reapplied.
- Soil composite samples shall be representative of the soil types delineated by the SCS Soil Survey (or the equivalent). Samples shall be taken at 0-6 inches soil depth for each land application site. Sampling shall be performed as outlined in the approved O&M Manual.
- Unless otherwise stated, all parameters are reported on a dry weight basis
- Sampling shall be performed as outlined in the approved Operations and Maintenance Manual and the Nutrient Management Plan.
- Results of the soil monitoring specified above shall be used to develop the nutrient management plan in accordance with Part I.C.5. Submission of a separate monitoring report is not required.
- Soil testing used to develop a Nutrient Management Plan must be conducted by a DCR approved laboratory in accordance with the Virginia Nutrient Management Standards and Criteria.

2. Attachment B has been provided for reporting soil monitoring.

B. ADDITIONAL TOTAL RESIDUAL CHLORINE (TRC) LIMITATIONS AND MONITORING REQUIREMENTS

1.
 - a. The permittee shall monitor the TRC at the outlet of the chlorine contact tank every two hours by grab sample.
 - b. No more than 36 of all samples taken after the chlorine contact tank shall be less than 1.0 mg/l for any one calendar month.
 - c. The facility shall operate the chlorination facilities in a manner, which will ensure continuous disinfection. The permittee shall notify the DEQ in the event that TRC sample collected is less than 0.20 mg/l for 3 or more consecutive readings or the TRC sample is <0.10 mg/l for any reading. Reporting will be conducted in accordance with Part II.H. of the permit.
2. If an alternative to chlorination as a disinfection method is chosen, enterococci shall be limited and monitored by the permittee as specified below:

Discharge Limitations
Monthly Average

Enterococci 35*
(n/100 ml)

Monitoring Requirements
Frequency Sample Type

1/Day Grab
(Between 10 AM & 4 PM)

* Geometric Mean

The above requirements, if applicable, shall substitute for the TRC requirements delineated in Parts I.A. and I.B.1 above.

C. OTHER REQUIREMENTS OR SPECIAL CONDITIONS

1. Reopeners

a. Biosolids Reopener

The Board will modify or revoke and reissue this permit as appropriate and necessary to incorporate changes to any applicable standard or requirement for the use or disposal of biosolids, industrial wastewater, sludge, or septage promulgated under Section 405(d) of the Clean Water Act, State Water Control Law, or the VPDES Permit Regulation (9VAC25-31).

b. Water Quality Standards Reopener

Should effluent monitoring indicate the need for any water quality based limitation, this permit may be modified or, alternatively, revoked and reissued to incorporate appropriate limitations.

2. Licensed Operator Requirement

The permittee shall employ or contract at least one Class I licensed wastewater works operator for this facility. The license shall be issued in accordance with Title 54.1 of the Code of Virginia and the regulations of the State Water Control Board for Waterworks and Wastewater Works Operators. The permittee shall notify the Tidewater Regional Office in writing whenever he is not complying, or has grounds for anticipating he will not comply with this requirement. The notification shall include a statement of reasons and a prompt schedule for achieving compliance.

3. Reliability Class

The permitted treatment works shall meet Reliability Class I.

4. CTC, CTO and O & M Manual Requirements

The permittee shall, in accordance with the Sewage Collection and Treatment Regulations, obtain a **Certificate to Construct (CTC)**, and a **Certificate to Operate (CTO)** from the DEQ Regional Office **prior to constructing wastewater treatment facilities and operating the facilities**, respectively.

The permittee shall review the existing O & M Manual and notify the DEQ Regional Office, in writing, that it is still current. This O&M Manual shall be developed in accordance with the Sewage Collection and Treatment Regulations. Additional items shall include descriptions of the treatment works operations and its contributing sources, and practices necessary to achieve compliance with this permit. If the O & M Manual is no longer current, a revised O & M Manual shall be submitted for approval to the DEQ Regional Office. **Future changes to the facility** must be addressed by the submittal of a revised O & M Manual **within 90 days of the changes.**

Noncompliance with the CTC, CTO, or the O & M Manual shall be deemed a violation of the permit.

Letter/Revised Manual Due: No later than April 17, 2012

5. 95% Design Capacity Notification

A written notice and a **plan of action** for ensuring continued compliance with the terms of this permit shall be submitted to the DEQ Tidewater Regional Office when the monthly average flow influent to the sewage treatment plant reaches 95 percent of the design capacity authorized in this permit for each month of any three consecutive month period. The written notice shall be submitted within 30 days and the plan of action shall be received at the DEQ Tidewater Regional Office **no later than 90 days from the third consecutive month for which the flow reached 95 percent of the design capacity.** The plan shall include the necessary steps and a prompt schedule of implementation for controlling any current or reasonably anticipated problem resulting from high influent flows. Failure to submit an adequate plan in a timely manner shall be deemed a violation of this permit.

6. Quantification Levels Under Part I.A.

- a. The maximum quantification levels (QL) shall be as follows:

<u>Effluent Characteristic</u>	<u>Quantification Level</u>
Chlorine	0.10 mg/l
BOD ₅	5 mg/l
TSS	1.0 mg/l

- b. The permittee may use any approved method which has a QL equal to or lower than the (QL) listed in 6.a above. The QL is defined as the lowest concentration used to calibrate a measurement system in accordance with the procedures published for the method.
7. Compliance Reporting Under Part I.A.
- a. Monthly Average -- Compliance with the monthly average limitations and/or reporting requirements for the parameters listed in Part I.C.6.a. shall be determined as follows: All data below the quantification level (QL) listed in Part I.A. above shall be treated as zero. All data equal to or above the QL listed in Part I.C.6.a. above shall be treated as it is reported. An arithmetic average shall be calculated using all reported data, including the defined zeros, for the month. This arithmetic average shall be reported on the DMR as calculated. If all data are below the QL, then the average shall be reported as <QL.
 - b. Maximum Weekly Average -- Compliance with the weekly average limitations and/or reporting requirements for the parameters listed in Part I.C.6.a shall be determined as follows: All data below the quantification level (QL) listed in Part I.C.6.a above shall be treated as zero. All data equal to or above the QL shall be treated as reported. An arithmetic average shall be calculated using all reported data, including the defined zeros, collected within each complete calendar week and contained within the reporting month. The maximum value of the weekly averages thus determined shall be reported on the Discharge Monitoring report (DMR). If all data are below the QL, then the average shall be reported as <QL.
 - c. Any single datum required shall be reported as "<QL" if it is less than the QL listed in Part I.C.6.a. above. Otherwise, the numerical value shall be reported.
 - d. Where possible, all limit values on the Part I.A. limits page(s) are expressed in two significant figures. As a result, single, trailing zeros occurring after any single digit are significant. Effluent limits of 10 or greater are rounded to two significant whole numbers, with the exception that loading limits are expressed as whole numbers.

- e. The permittee shall report at least the same number of significant figures as the permit limit for a given parameter. Regardless of the rounding convention used (i.e., 5 always rounding up or to the nearest even number) by the permittee, the permittee shall use the convention consistently, and shall ensure that consulting laboratories employed by the permittee use the same convention.

8. Indirect Dischargers

The permittee shall provide adequate notice to the DEQ Tidewater Regional Office of the following:

- a. Any new introduction of pollutants into the treatment works from an indirect discharger which would be subject to Section 301 or 306 of Clean Water Act and the State Water Control Law if it were directly discharging those pollutants; and
- b. Any substantial change in the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of this permit.

Adequate notice shall include information on (i) the quality and quantity of effluent introduced into the treatment works, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the treatment works.

9. Effluent Monitoring Frequencies

Should the facility permitted herein be issued a Warning Letter, a Notice of Violation, or be the subject of an active enforcement action for any of the parameters listed below for any outfall at the facility, the following effluent monitoring frequencies shall become effective starting with the next full month following notification and remain in effect until the permit's expiration date.

<u>Effluent Parameter</u>	<u>Frequency</u>
BOD5	1/Day
TSS	1/Day
Fecal Coliform	1/Day

No other effluent limitations or monitoring requirements are affected by this special condition.

D. BIOSOLIDS SPECIAL CONDITION

1. The permittee shall conduct all biosolids use or disposal activities in accordance with the Sludge Management Plan (SMP) approved with the issuance of this permit. Any proposed changes in the biosolids use or disposal practices or procedures followed by the permittee shall be documented and submitted for Department of Environmental Quality approval 90 days prior to the effective date of the changes. Upon approval, the SMP becomes an enforceable part of the permit. The permit may be modified or alternatively revoked and reissued to incorporate limitations/conditions necessitated by substantive changes in biosolids use or disposal practices.
2. Biosolids shall be applied only at the sites identified in the Fact Sheet associated with this permit.
3. Biosolids shall not be applied to the land if it is likely to adversely affect a threatened or endangered species listed under Virginia Water Quality Standards Regulation (9 VAC 25-260-00 et seq.) or Section 4 of the Endangered Species Act or if the land application is likely to adversely affect its designated critical habitat.
4. Valid landowner consent forms shall be maintained for all sites listed in the Application associated with this permit. The permittee shall provide the owner or leaseholder of the land on which the biosolids is applied notice and necessary information to comply with the requirements in this permit.
5. A nutrient management plan (NMP) shall be developed for each land application site prior to biosolids application. A copy of the NMP shall be present at the land application site during land application operations and available for review by DEQ staff. A copy of the NMP shall be submitted to the DEQ - TRO Regional Office no later than 30 days after the application is completed. Copies of the NMP shall also be provided to the farmer/operator of the site, the Department of Conservation and Recreation (DCR) regional office and the chief executive officer or designee for the local government, unless they request in writing not to receive the NMP. The NMP shall be enforceable through this permit.

The nutrient management plan shall be prepared and revised by a certified nutrient management planner as stipulated in 4VAC5-15-10 et seq.. The nutrient management plan shall be written in accordance with the criteria stipulated in 4VAC5-15-10 et seq.

All nutrient management plans shall account for all sources of nutrients to be applied to the site.

Where land application of biosolids is to be performed more frequently than once every three years at greater than 50% of the annual agronomic rate; or where the owner or lessee of the land application site is the operator of a confined animal feeding operation in accordance with §62.1-44.17:1 of the Code of Virginia; or where site-specific conditions demonstrate an increased risk to state waters, the permittee shall submit an NMP that has been approved by the DCR with a copy of the approval letter at the time of any permit modification requests to DEQ.

6. The permittee shall provide written notification to the DEQ-Tidewater Regional Office at least 14 days prior to commencing land application of biosolids at each permitted site. The notice shall contain the following information:
 - a. permitted site identification,
 - b. permitted site location
 - c. approximate dates of application, and
 - d. expected sources of biosolids.
7. At least 48 hours prior to the delivery of biosolids to each land application site, the permittee shall post a sign at the site notifying the public that biosolids will be applied. The sign shall be maintained at the site during the application and for at least 48 hours after the biosolids application has been completed.
 - a. The sign shall be visible and legible from the public road adjacent to the field, or the intersection of the public road and the main access road or driveway to the site. Upon the request of the permittee, the department may grant a waiver to this or any other signage requirement, or require alternative posting options due to extenuating circumstances.
 - b. The sign shall be weather-resistant and sturdy enough to remain in place and legible throughout the period that the sign is required at the site. The sign shall be at least four square feet in area and shall only contain the following information:
 - 1) A statement that biosolids are being land-applied at the site;
 - 2) The name and telephone number of the permit holder;
 - 3) The name or title, and telephone number of an individual designated by the permit holder to respond to complaints and inquiries;

- 4) Contact information for the DEQ-Tidewater Regional Office, including a telephone number for complaints and inquiries.
8. At least 100 days prior to the first land application of biosolids at a site permitted under the VPA/VPDES Permit regulation, the permit holder shall provide written notification to the local government where the site is located. The notice shall identify the location of the permitted site and the expected sources of the biosolids to be applied to the site. This requirement may be satisfied by providing a list of all available permitted sites in the locality at least 100 days prior to commencing the application at any site on the list. If the site is located in more than one county or city, the notice shall be provided to all jurisdictions where the site is located.
 9. The permittee shall ensure that no land application activities occur unless a certified land applicator (as specified in Article 5 of the VPA Permit Regulation 9 VAC 25-32 (Sections 690 through 760)) is onsite at all times during such land application. Certified land applicators may be considered to be onsite if they are at the site permitted for land application and, if it is necessary to leave the site, they are available within 30 minutes to return to the site to verify and ensure that land application of biosolids is in compliance with the permit.
 10. Land application sites receiving infrequent biosolids applications shall receive a complete biosolids application no more than once in three years.
 - a. For the purposes of this special condition, a complete biosolids application shall be defined as the sum of all biosolids applications made within a 12 month period, regardless of whether or not the full agronomic rate was applied.
 - b. Prior to any subsequent land application, the NMP shall be updated using soil sampling test results, in accordance with Part I A., that are the most recent, but not more than 3 years old; and
 - c. The rate of biosolids application shall never exceed 15 dry tons per acre per three years.
 11. Land application sites receiving frequent, below agronomic rate biosolids applications shall receive biosolids more frequently than once every three years at reduced rates as specified below:
 - a. The application of biosolids together with any other source of PAN shall not exceed 70% of the agronomic

loading rate for the crops, including permanent pasture or hay, grown on each site.

- b. The 70% application rate shall be calculated after accounting for the previous two years' applied biosolids nitrogen mineralization rates.
- c. When a maximum of 50% of the nitrogen requirement of the permanent pasture or hay crop is applied on an annual basis, it is not necessary to account for the previous two years' applied biosolids nitrogen mineralization rates; and
- d. The rate of biosolids application shall never exceed 15 dry tons per acre per year.

12. At no time shall liquid biosolids (<15% total solids) be surface applied at a hydraulic loading rate greater than 14,000 gal/ac (0.5 inches depth) in a single application procedure. Sufficient drying time shall be allowed between subsequent applications.

13. Operational limitations during periods of inclement weather.

- a. Biosolids shall not be applied during times when the ground is saturated.
- b. Surface application of biosolids shall not be made to cultivated or bare ground covered with ice. However, biosolids may be applied to snow covered ground if snow cover does not exceed an average depth of one inch and the snow and biosolids are incorporated within 24 hours of application.
- c. Biosolids may be applied to frozen ground only under the following conditions:
 - (1) solids content of the biosolids is greater than 15%,
 - (2) slopes are not greater than 5%,
 - (3) a minimum of a 200 foot vegetative (or at least 60% uniformly covered by stalks or other vegetation) buffer is maintained from all surface water courses,
 - (4) only those soils characterized by the USDA as "well drained" are utilized,

- (5) stalks, vines, stubble or other vegetation or crop residue provides uniform soil coverage of at least 60% and is sufficient to prevent surface runoff.
- 14. Biosolids shall be direct injected or incorporated (mixed within the normal plow layer) within 48 hours if applied on sites with less than 60% uniform soil coverage by crop residue, stalks, vines, stubble, or other vegetation within any portion of the permitted site or if applied to areas subject to frequent flooding as defined by soil survey information.
- 15. Biosolids shall not be applied to sites where slopes exceed 15%. During the period of November 16 to March 15 of the following year, when biosolids is applied to site slopes between 7% and 15%, one of the following best management practices shall be used to prevent runoff and soil loss:
 - (1) Biosolids is surfaced applied or subsurface injected beneath an established living crop such as hay, pasture, or timely planted small grain or cover crop;
 - (2) Biosolids is surfaced applied or subsurface injected so that immediately after application the crop residue still provides at least 60% soil surface coverage; or
 - (3) Biosolids is applied by surface application or subsurface injection and the site is operated in compliance with an existing soil conservation plan approved by the USDA Natural Resource Conservation Service and will remain in compliance after any subsequent tillage operation to incorporate the biosolids.

During the period of November 16 to March 15 of the following year, if site slopes between 5% and 7%, biosolids can be applied by surface application or subsurface injection followed by:

- (4) Biosolids are surface applied or subsurface injected beneath an established living crop such as hay, pasture, or timely planted small grain or cover crop;
- (5) Incorporation within 48 hours of application if crop residue still provides at least 30% soil

surface coverage immediately following incorporation; or

- (6) Ridge tilling or chisel plowing within 48 hours of application.

16. Land application of biosolids shall not occur within the following minimum buffer zones:

Minimum Distance (feet) to Land Application Area			
<u>Adjacent Features</u>	<u>Surface Application ^a</u>	<u>Incorporation or Injection</u>	<u>Winter ^b</u>
Occupied dwellings ^c	200	200	200
Water supply wells and springs	100	100	100
Property lines ^c	100	50	100
Perennial streams and other surface waters except intermittent streams	50	35	100
Intermittent streams/drainage ditches	25	25	50
All improved roadways	10	5	10
Rock outcrops and sinkholes	25	25	25
Agricultural drainage ditches with slopes equal to or less than 2.0%	10	5	10
<p>a. Not plowed or disked to incorporate within 48 hours.</p> <p>b. From November 16 of one year to March 15 of the following year buffers will be increased at sites where biosolids are surface applied and average site slopes are between 7% and 15%..</p> <p>c. Dwelling and property line buffers may be waived or reduced with the written consent of affected landowners and residents.</p>			

17. All vehicles that transport biosolids shall be sufficiently sealed to prevent leaking and spillage of biosolids. Totally closed, water tight transport vehicles with rigid tops shall be provided for liquid biosolids to prevent spillage.
18. If the cadmium concentration of the biosolids is greater than 21 mg/kg, post application soil pH shall be 6.0 or greater. If the pre-application soil pH is below 6.0,

land application of lime, in addition to that which may be contained in the biosolids may be required in order to obtain a pH of 6.0 or greater after application of biosolids. If additional lime is needed, the calculation of lime application rate shall consider the Calcium Carbonate Equivalency (CCE) of the biosolids at the proposed biosolids application site. The soil analysis to determine pre-application soil pH shall not be greater than 1 year old at the time of land application.

19. If the permittee generates biosolids subject to the cumulative pollutant loading rates, a permit modification will be required. The DEQ-Tidewater Regional Office shall be notified immediately and the permit modified to include the requirements for the CPLR biosolids before application of the CPLR biosolids.

20. Site Restrictions for Land Application of Class B Biosolids

- a. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after application of biosolids;
- b. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after application of biosolids when the biosolids remain on the land surface for four months or longer prior to incorporation into the soil;
- c. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months after application of biosolids when the biosolids remain on the land surface for less than four months prior to incorporation into the soil;
- d. Food crops, feed crops, and fiber crops shall not be harvested for 30 days after application of biosolids;
- e. Animals shall not be allowed to graze on the land for 30 days after application of biosolids;
- f. Lactating dairy livestock shall not be allowed on sites within 60 days following biosolids application and green chopped forage from the site shall not be fed to milk cows if forage is removed within 60 days following biosolids application.

- g. Turf grown on land where biosolids is applied shall not be harvested for one year after application of the biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by the State Water Control Board;
 - h. Public access to land with a high potential for public exposure shall be restricted for one year after application of biosolids;
 - i. Public access to land with a low potential for public exposure shall be restricted for 30 days after application of biosolids.
21. For PC and CPLR biosolids, the permittee is required to retain the following information a) through g) for at least 5 years:
- a. The concentrations of each pollutant in Part I.A.1.;
 - b. Which pathogen reduction requirements in Part I.A.1. are met;
 - c. Which vector attraction reduction requirements in Part I.A.1. are met;
 - d. A description of how the management practices specified in the approved O&M Manual and/or this permit are met;
 - e. A description of how the site restrictions specified in the approved O&M Manual and/or this permit are met (if applicable);
 - f. The date bulk biosolids are applied to each site
 - g. The following certification statement:
"I certify under the penalty of law, that the information that will be used to determine compliance with the pathogen requirements in [permittee shall insert either 9 VAC 25-31-710 A or B., the vector attraction reduction requirements in [permittee shall insert one of the vector attraction reduction requirements in 9 VAC 25-31-720 B 1 through B 10], the management practices, and the site restrictions (if applicable) for each site on which bulk biosolids are applied was prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

22. Reporting Land Application of Biosolids

The permittee shall submit, either hard copy or electronically, a **monthly activity report** to the DEQ-TRO Regional Office and Office of Land Application by the 15th day of the month (postmark), for land application activities that occurred in the previous calendar month.

The monthly activity report shall include the following information:

- a. Name of Permittee, DEQ permit number and dates of activity;
- b. Name and certificate number of the certified land applicators with a signed statement attesting that they were onsite at the times of the reported applications and that those applications were in compliance with the permit;
- c. Identification of land application sites, including the county where taxes are remitted and permitted site identification name, letters and numbers, as appropriate;
- d. The source of biosolids and approximate field area (reported to the nearest 0.1 acres) receiving those biosolids;
- e. The amount of biosolids applied in dry tons and the method and calculations used to determine the reported value. Dry ton value shall be reported to the nearest 0.01 dry tons;
- f. Dates and type of any interactions with local monitors and names of individuals involved in the interactions;
- g. Name of responsible representative of permittee and a statement signed and dated by that representative indicating that the information submitted has been verified by that representative as correctly reported in accordance with the Part II.K;
- h. Presentation of the calculation of the total fee;
- i. A summary list of the total amount of biosolids applied and the calculated fee broken down by County, presented in alphabetical order by county;
- j. Biosolids Loading - for each application of biosolids to an application site, the permittee shall submit in the monthly biosolids monitoring report, the concentration of PAN and P_2O_5 (as pounds per dry ton) in the biosolids and the amount of PAN and P_2O_5 (as pounds per acre) applied to the site from the biosolids.

23. The permittee shall remit to the DEQ a fee of \$7.50 per dry ton of biosolids applied in the Commonwealth of Virginia.
- a. Upon reviewing the report in Part I.F.31, DEQ will notify the Permittee of the fee that is due and set a due date. Failure to submit payment within 60 days of notification by DEQ of the fee due may result in the permit being revoked or approved sources being reclassified as unapproved.
 - b. The check or money order shall be payable to the "Treasurer of Virginia", and mailed with the invoice to:
Department of Environmental Quality
Receipts Control
P.O. Box 1104
Richmond, VA 23218
24. The permittee shall submit an **Annual Report** not later than February 19th of each year to the DEQ-TRO Regional Office. Each report is for the previous calendar year's activity. If no biosolids were applied to the land during the reporting period, "no biosolids were applied" shall be reported. The report shall include at minimum:
- a. Biosolids Monitoring Reports as required by Part I.A.1, certified and signed in accordance with Part II.K;
 - b. A summary of biosolids disposal contracts currently held as well as any other biosolids or sludges currently being handled;
 - c. A summary of approved biosolids storage facilities including the capacity at each facility which is dedicated for a particular biosolids. Provide the amount of remaining storage capacity;
 - d. A summary of land application sites completed in the last year including, by county, the source, dry tons, field designation, acres and the date of last application;
 - e. A summary of any partially completed land application sites including the date of last application; and
 - f. The total acreage of permitted land application sites available for use in the next calendar year.
25. Biosolids Storage Special Conditions
- a. Emergency storage - The owner shall notify the DEQ - Tidewater Regional Office upon implementation of any emergency storage. Emergency storage may be implemented due to unforeseen circumstances, including the delivery of sludge

which has not been stabilized to biosolids standards. The biosolids in emergency storage shall be managed in accordance with the approved O&M Manual and shall not result in water quality, public health or nuisance problems.

- b. Temporary storage - The owner shall notify the DEQ - Tidewater Regional Office upon implementation of any temporary storage. Temporary storage may be implemented due to unforeseen climatic factors that prevent land application of biosolids on a site on the same day that the biosolids has been offloaded at the site or is in transit to the site. Temporary storage is restricted as follows:

- (1) Biosolids stored at the site shall be land applied prior to additional offloading of biosolids at the same site;
- (2) The owner shall be restricted to storing a daily maximum amount of 100 wet tons per operational site;
- (3) The stored biosolids shall be land applied within 30 days from the initiation of storage or moved to a routine biosolids facility;
- (4) Approval of plans for temporary storage will be considered as part of the overall operations and maintenance manual;
- (5) Temporary storage shall not occur in areas prone to flooding at a 25-year or less frequency interval;
- (6) A synthetic liner shall be required for placement under and over biosolids stored in this manner with one exception: where biosolids is stockpiled for less than seven days, a liner placed under the stored biosolids is not required. Surface water diversions and other best management provisions (BMP) should be utilized as appropriate; and
- (7) Temporary storage shall not result in water quality, public health or nuisance problems.

E. PRETREATMENT

The permittee's pretreatment program has been approved. The program is an enforceable part of this permit. The permittee shall:

1. Implement a pretreatment program that complies with the Clean Water Act, Water Control Law, State Regulations and the approved program.
2. Submit to the DEQ Regional Office an annual report that describes the permittee's program activities over the previous year. The annual report shall be submitted no later than January 31 of each year and shall include:
 - a. An updated list of Significant Industrial Users* showing the categorical standards and local limits applicable to each.
 - b. A summary of the compliance status of each Significant Industrial User with pretreatment standards and permit requirements.
 - c. A summary of the numbers and types of Significant Industrial User sampling and inspections performed by the POTW.
 - d. All information concerning any interference, upset, VPDES permit or Water Quality Standards violations directly attributable to Significant Industrial Users and the enforcement actions taken to alleviate said events.
 - e. A description of all enforcement actions taken against Significant Industrial Users over the previous 12 months.
 - f. A summary of any changes to the submitted pretreatment program that have not been previously reported to the DEQ Regional Office.
 - g. A summary of the permits issued to Significant Industrial Users since the last annual report.
 - h. POTW and self-monitoring results for Significant Industrial Users determined to be in significant non-compliance during the reporting period.
 - i. Results of the POTW's influent, effluent, and sludge

sampling not previously submitted to DEQ.

- j. Copies of newspaper publications of all Significant Industrial Users in significant non-compliance during the reporting period. This is due no later than March 31 of each year.
 - k. Signature of authorized representative.
3. Within 180 days of the effective date of this permit, the permittee shall submit to the DEQ Regional Office a survey of all Industrial Users discharging to the POTW. The information shall be submitted on the DEQ Discharger Survey Form, or an equivalent form that includes the quantity and quality of the wastewater. Survey results shall include the identification of significant industrial users of the POTW.
 4. Submit any changes to the approved pretreatment program to the DEQ Regional Office and obtain approval before implementation of the changes.
 5. Ensure all Significant Industrial Users' permits issued by the POTW are effective and enforceable.
 6. Inspect and sample all Significant Industrial Users at a minimum of once a year.
 - a. Sampling shall include all regulated parameters, and shall be representative of the wastewater discharged.
 - b. Inspection of the Significant Industrial Users shall cover all areas which could result in wastewater discharge to the treatment works including manufacturing, chemical storage, pretreatment facilities, spill prevention control procedures, hazardous waste generation, and Significant Industrial User's self-monitoring and records.
 7. Implement the reporting requirements of Part VII of the VPDES Permit Regulation.
 8. Review the enforcement response plan (ERP) and ensure it meets State and Federal regulatory requirements. The approved ERP is an enforceable part of this permit and shall be implemented.
 9. Develop local limits or reevaluate local limits using current influent, effluent, and sludge monitoring data and submit the data and results of the evaluation to the DEQ Regional Office

within one year of the effective or modification date. All Significant Industrial Users shall be sampled at the end of any categorical processes and at the entrance to the treatment works.

10. Ensure that adequate resources are available to implement the approved program.
11. Meet all public participation requirements and annually public notice Significant Industrial Users in significant non-compliance with pretreatment standards and requirements for the previous 12 months.
12. In lieu of the survey, the permittee may elect to develop, submit for approval and implement the plan to continuously survey the industrial community in their jurisdiction.
13. The DEQ may require the POTW to institute changes to its pretreatment program:
 - a. If the approved program is not implemented in a way satisfying the requirements of the Clean Water Act, Water Control Law, or State Regulations;
 - b. If problems such as pass-through, interference, water quality standards or sludge contamination develop or continue; and
 - c. If Federal, State or local requirements change.

* A significant industrial user is one that:

1. Has a process wastewater (**) flow of 25,000 gallons or more per average workday;
2. Contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW;
3. Is subject to the categorical pretreatment standards; or
4. Has significant impact, either singularly or in combination with other Significant Dischargers, on the treatment works or the quality of its' effluent.

** Excludes sanitary, non-contact cooling water, and boiler blowdown.

F. TOXICS MANAGEMENT PROGRAM

1. Biological Monitoring

- a. In accordance with the schedule in 2. below, the permittee shall conduct annual acute toxicity tests for the duration of the permit. The permittee shall collect 24-hour flow-proportioned composite samples of final effluent from outfall 001 in accordance with Part 1.A. of this permit. The acute tests to use are:

48 Hour Static Acute test using Americamysis bahia and
48 Hour Static Acute test using Cyprinodon variegatus

These acute tests shall be performed with a minimum of 5 dilutions, derived geometrically, for the calculation of a valid LC_{50} . Express the results as TU_a (Acute Toxic Units) by dividing $100/LC_{50}$ for reporting. Both species should be analyzed at the same time from the 24-hour flow-proportioned composite sample. Toxicity samples shall be taken at the same time as the other chemical parameter monitoring listed in Part I.A. of this permit for outfall 001.

Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR 136.3.

- b. The permittee may provide additional samples to address data variability during the period of initial data generation. These data shall be reported and may be included in the evaluation of the effluent toxicity. Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR 136.3.
- c. The test dilutions shall be able to determine compliance with the following endpoints:
- (1) Acute LC_{50} of $\geq 3\%$ equivalent to a TU_a of ≤ 33
- d. All applicable data will be evaluated for reasonable potential at the conclusion of the test period. The data may be evaluated sooner if requested by the permittee, or if toxicity has been noted. Should evaluation of the data indicate that a limit is needed, a WET limit and compliance schedule will be required and the toxicity tests of F.1.a. may be discontinued. Permit specific limits in lieu of a WET limit may be added, should it be demonstrated that toxicity is due to

specific parameters. The pollutant specific limits must control the toxicity of the effluent.

2. Reporting Schedule

The permittee shall report the results and supply **one** complete copy of the toxicity test reports to the Tidewater Regional Office in accordance with the schedule below. A complete report must contain a copy of all laboratory benchsheets, certificates of analysis, and all chains of custody.

(a)	Conduct first annual TMP test for outfall 001 using <u>Americamysis bahia</u> and <u>Cyprinodon variegatus</u>	By December 31, 2012
(b)	Submit results of all biological tests	Within 60 days of the sample date and no later than January 10, 2013
(c)	Conduct subsequent annual TMP tests for outfall 001 using <u>Americamysis bahia</u> and <u>Cyprinodon variegatus</u>	By December 31, 2013, 2014, 2015, and 2016
(d)	Submit subsequent annual biological tests	Within 60 days of the sample date and no later than January 10, 2014, 2015, 2016 and 2017

ATTACHMENT A

NOTICE AND NECESSARY INFORMATION

Part I - To Be Completed by PREPARERS of Sewage Sludge

This form is to assist compliance with the bulk sewage sludge notification requirements (9 VAC 25-31-530 F and/or H). Please note, however, that if the sewage sludge meets the exceptional quality criteria, then the notification requirements do not apply. This form can be used by preparers of sewage sludge to transmit information to land appliers and also by land appliers to transmit information to land owners or lease holders. The facility may also choose to provide a form, provided that all information on this attachment is present on the form used.

A. Please provide pollutant concentrations

Name	Concentration (mg/kg) Dry Weight	Pollutant Concentrations (Table 3, 9 VAC 25-31-540) (Monthly Average)	Ceiling Concentrations* (Table 1, 9 VAC 25-31-540) (Daily Maximum)
Arsenic		41 mg/kg	75 mg/kg
Cadmium		39 mg/kg	85 mg/kg
Copper		1500 mg/kg	4300 mg/kg
Lead		300 mg/kg	840 mg/kg
Mercury		17 mg/kg	57 mg/kg
Molybdenum		-	75 mg/kg
Nickel		420 mg/kg	420 mg/kg
Selenium		100 mg/kg	100 mg/kg
Zinc		2800 mg/kg	7500 mg/kg
Total Nitrogen		N/A	N/A

- Sludge may not be land applied if any pollutant exceeds these values.

B. Pathogen Reduction (9 VAC 25-31-710)

☐ Class A ☐ Class B

C. Vector Attraction Reduction (9 VAC 25-31-720)

☐ Option 1 ☐ Option 2 ☐ Option 3 ☐ Option 4
☐ Option 5 ☐ Option 6 ☐ Option 7 ☐ Option 8
☐ No vector attraction reduction options were performed

D. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and official title:

Signature: _____ Date: _____

Signed: _____

Telephone number: () _____

ATTACHMENT A (Continued)

Part II - To Be Completed by LAND APPLIER of Sewage Sludge

- A. If the pollutant levels in the sewage sludge do not meet the pollutant concentration limits in Part I A of this attachment, then the land applier must provide the land owner with the following information:
- Location of land application site
 - Number of hectares where the sewage sludge was applied
 - Date and time bulk sewage sludge was applied
 - Amount of bulk sewage sludge applied
 - Record the amount of each metal and nitrogen applied in pounds per acre or kilogram per hectare
- B. If the preparer did not perform vector attraction reduction options (see Part I), then either option 9 or 10 must be performed by the land applier. Please indicate if option 9 or 10 was performed.
- ___ Option 9 - Subsurface Injection
___ Option 10 - Incorporated into the soil
___ N/A
- C. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and official title: _____

Signature: _____ Date Signed: _____

Telephone number: _____

ATTACHMENT B
DEPARTMENT OF ENVIRONMENTAL QUALITY
VPDES LAND APPLICATION MONITORING REPORT
Soils Parameters

Facility Name: Hampton Road Sanitation District
 Address: Atlantic STP,
 1436 Air Rail Ave
 Virginia Beach, VA 23455
 VPDES Permit No.: VA0081248

Report Period: From ____ / ____ / ____ To ____ / ____ / ____
 Land Application Site: _____

Parameters	Units		Monitoring Results		Analysis Frequency	Sample Type
			Average	Maximum		
Soil pH	S.U.	Reported				
		Required	NL	NL	1/Application	Composite
Cation Exchange Capacity	meq/100g	Reported				
		Required	NL	NL	1/Application	Composite
Available Phosphorus	mg/kg	Reported				
		Required	NL	NL	1/Application	Composite
Exchangeable Potassium	mg/kg	Reported				
		Required	NL	NL	1/Application	Composite
Exchangeable Magnesium	mg/kg	Reported				
		Required	NL	NL	1/Application	Composite

Name of Principal Exec. Officer or Authorized Agent / Title

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations. See 18 U.S.C. §1001 and 33 U.S.C. §1319. (Penalties under these statutes may include fines up to \$10,000 and or maximum imprisonment of between 6 months and 5 years.)

Signature of Principal Officer or Authorized Agent / Date

CONDITIONS APPLICABLE TO ALL VPDES PERMITS

A. Monitoring.

1. Samples and measurements taken as required by this permit shall be representative of the monitored activity.
2. Monitoring shall be conducted according to procedures approved under Title 40 Code of Federal Regulations Part 136 or alternative methods approved by the U.S. Environmental Protection Agency, unless other procedures have been specified in this permit.
3. The permittee shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals that will insure accuracy of measurements.
4. Samples taken as required by this permit shall be analyzed in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories.

B. Records.

1. Records of monitoring information shall include:
 - a. The date, exact place, and time of sampling or measurements;
 - b. The individual(s) who performed the sampling or measurements;
 - c. The date(s) and time(s) analyses were performed;
 - d. The individual(s) who performed the analyses;
 - e. The analytical techniques or methods used; and
 - f. The results of such analyses.
2. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years, the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period of retention shall be

extended automatically during the course of any unresolved litigation regarding the regulated activity or regarding control standards applicable to the permittee, or as requested by the Board.

C. Reporting Monitoring Results.

1. The permittee shall submit the results of the monitoring required by this permit not later than the 10th day of the month after monitoring takes place, unless another reporting schedule is specified elsewhere in this permit. Monitoring results shall be submitted to:

Department of Environmental Quality
Tidewater Regional Office
5636 Southern Boulevard
Virginia Beach, VA 23462

2. Monitoring results shall be reported on a Discharge Monitoring Report (DMR) or on forms provided, approved or specified by the Department.
3. If the permittee monitors any pollutant specifically addressed by this permit more frequently than required by this permit using test procedures approved under Title 40 of the Code of Federal Regulations Part 136 or using other test procedures approved by the U.S. Environmental Protection Agency or using procedures specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or reporting form specified by the Department.
4. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

D. Duty to Provide Information.

The permittee shall furnish to the Department, within a reasonable time, any information which the Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Board may require the permittee to furnish, upon request, such plans, specifications, and other pertinent information as may be necessary to determine the effect of the wastes from his discharge on the quality of state waters, or such other information as may be necessary to accomplish the purposes of the State Water Control Law. The permittee shall also furnish to the Department upon request, copies of records required to be kept by this permit.

E. Compliance Schedule Reports.

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

F. Unauthorized Discharges.

Except in compliance with this permit, or another permit issued by the Board, it shall be unlawful for any person to:

1. Discharge into state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances; or
2. Otherwise alter the physical, chemical or biological properties of such state waters and make them detrimental to the public health, or to animal or aquatic life, or to the use of such waters for domestic or industrial consumption, or for recreation, or for other uses.

G. Reports of Unauthorized Discharges.

Any permittee who discharges or causes or allows a discharge of sewage, industrial waste, other wastes or any noxious or deleterious substance into or upon state waters in violation of Part II F; or who discharges or causes or allows a discharge that may reasonably be expected to enter state waters in violation of Part II F, shall notify the Department of the discharge immediately upon discovery of the discharge, but in no case later than 24 hours after said discovery. A written report of the unauthorized discharge shall be submitted to the Department, within five days of discovery of the discharge. The written report shall contain:

1. A description of the nature and location of the discharge;
2. The cause of the discharge;
3. The date on which the discharge occurred;
4. The length of time that the discharge continued;
5. The volume of the discharge;
6. If the discharge is continuing, how long it is expected to continue;
7. If the discharge is continuing, what the expected total volume of the discharge will be; and
8. Any steps planned or taken to reduce, eliminate and prevent a recurrence of the present discharge or any future discharges not authorized by this permit.

Discharges reportable to the Department under the immediate reporting requirements of other regulations are exempted from this requirement.

H. Reports of Unusual or Extraordinary Discharges.

If any unusual or extraordinary discharge including a bypass or upset should occur from a treatment works and the discharge enters or could be expected to enter state waters, the permittee shall promptly notify, in no case later than 24 hours, the Department by telephone after the discovery of the discharge. This notification shall provide all available details of the incident, including any adverse affects on aquatic life and the known number of fish killed. The permittee shall reduce the report to writing and shall submit it to the Department within five days of discovery of the discharge in accordance with Part II I 2. Unusual and extraordinary discharges include but are not limited to any discharge resulting from:

1. Unusual spillage of materials resulting directly or indirectly from processing operations;
2. Breakdown of processing or accessory equipment;
3. Failure or taking out of service some or all of the treatment works; and
4. Flooding or other acts of nature.

I. Reports of Noncompliance

The permittee shall report any noncompliance which may adversely affect state waters or may endanger public health.

1. An oral report shall be provided within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which shall be reported within 24 hours under this paragraph:
 - a. Any unanticipated bypass; and
 - b. Any upset which causes a discharge to surface waters.
2. A written report shall be submitted within 5 days and shall contain:
 - a. A description of the noncompliance and its cause;
 - b. The period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and

- c. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

The Board may waive the written report on a case-by-case basis for reports of noncompliance under Part II I if the oral report has been received within 24 hours and no adverse impact on state waters has been reported.

3. The permittee shall report all instances of noncompliance not reported under Parts II I 1 or 2, in writing, at the time the next monitoring reports are submitted. The reports shall contain the information listed in Part II I 2.

NOTE: The immediate (within 24 hours) reports required in Parts II G, H and I may be made to the Department's Regional Office at (757) 518-2000 (voice), and online <http://www.deq.virginia.gov/prep/h2rpt.html> .

For reports outside normal working hours, leave a message and this shall fulfill the immediate reporting requirement. For emergencies, the Virginia Department of Emergency Services maintains a 24 hour telephone service at 1-800-468-8892.

J. Notice of Planned Changes.

1. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
 - a. The permittee plans alteration or addition to any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced:
 - (1) After promulgation of standards of performance under Section 306 of Clean Water Act which are applicable to such source; or
 - (2) After proposal of standards of performance in accordance with Section 306 of Clean Water Act which are applicable to such source, but only if the standards are promulgated in accordance with Section 306 within 120 days of their proposal;
 - b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations nor to notification requirements specified elsewhere in this permit; or
 - c. The alteration or addition results in a significant change in the permittee's sludge use or disposal

practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

2. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

K. Signatory Requirements.

1. Applications. All permit applications shall be signed as follows:
 - a. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
 - b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
 - c. For a municipality, state, federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a public agency includes: (i) The chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

2. Reports, etc. All reports required by permits, and other information requested by the Board shall be signed by a person described in Part II K 1, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described in Part II K 1;
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and
 - c. The written authorization is submitted to the Department.
3. Changes to Authorization. If an authorization under Part II K 2 is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part II K 2 shall be submitted to the Department prior to or together with any reports, or information to be signed by an authorized representative.
4. Certification. Any person signing a document under Parts II K 1 or 2 shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

L. Duty to Comply.

The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the State Water Control Law and the Clean Water Act, except that noncompliance with

certain provisions of this permit may constitute a violation of the State Water Control Law but not the Clean Water Act. Permit noncompliance is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the Clean Water Act within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if this permit has not yet been modified to incorporate the requirement.

M. Duty to Reapply.

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall apply for and obtain a new permit. All permittees with a currently effective permit shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Board. The Board shall not grant permission for applications to be submitted later than the expiration date of the existing permit.

N. Effect of a Permit.

This permit does not convey any property rights in either real or personal property or any exclusive privileges, nor does it authorize any injury to private property or invasion of personal rights, or any infringement of federal, state or local law or regulations.

O. State Law.

Nothing in this permit shall be construed to preclude the institution of any legal action under, or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any other state law or regulation or under authority preserved by Section 510 of the Clean Water Act. Except as provided in permit conditions on "bypassing" (Part II U), and "upset" (Part II V) nothing in this permit shall be construed to relieve the permittee from civil and criminal penalties for noncompliance.

P. Oil and Hazardous Substance Liability.

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Sections 62.1-44.34:14 through 62.1-44.34:23 of the State Water Control Law.

Q. Proper Operation and Maintenance.

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes effective plant performance, adequate funding, adequate staffing, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

R. Disposal of Solids or Sludges.

Solids, sludges or other pollutants removed in the course of treatment or management of pollutants shall be disposed of in a manner so as to prevent any pollutant from such materials from entering state waters.

S. Duty to Mitigate.

The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

T. Need to Halt or Reduce Activity not a Defense.

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

U. Bypass.

1. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Parts II U 2 and U 3.

2. Notice

- a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, prior notice shall be submitted, if possible at least ten days before the date of the bypass.
- b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Part II I.

3. Prohibition of bypass.

- a. Bypass is prohibited, and the Board may take enforcement action against a permittee for bypass, unless:
 - (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - (3) The permittee submitted notices as required under Part II U 2.
- b. The Board may approve an anticipated bypass, after considering its adverse effects, if the Board determines that it will meet the three conditions listed above in Part II U 3 a.

V. Upset.

- 1. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of Part II V 2 are met. A determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is not a final administrative action subject to judicial review.
- 2. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

- a. An upset occurred and that the permittee can identify the cause(s) of the upset;
 - b. The permitted facility was at the time being properly operated;
 - c. The permittee submitted notice of the upset as required in Part II I; and
 - d. The permittee complied with any remedial measures required under Part II S.
3. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

W. Inspection and Entry.

The permittee shall allow the Director, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act and the State Water Control Law, any substances or parameters at any location.

For purposes of this section, the time for inspection shall be deemed reasonable during regular business hours, and whenever the facility is discharging. Nothing contained herein shall make an inspection unreasonable during an emergency.

X. Permit Actions.

Permits may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

Y. Transfer of permits.

1. Permits are not transferable to any person except after notice to the Department. Except as provided in Part II Y 2, a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued, or a minor modification made, to identify the new permittee and incorporate such other requirements as may be necessary under the State Water Control Law and the Clean Water Act.
2. As an alternative to transfers under Part II Y 1, this permit may be automatically transferred to a new permittee if:
 - a. The current permittee notifies the Department at least 30 days in advance of the proposed transfer of the title to the facility or property;
 - b. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
 - c. The Board does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Part II Y 2 b.

Z. Severability.

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

NAME	HRSD - Atlantic Sewage Treatment Plant		
ADDRESS	1436 Air Rail Ave		
	Virginia Beach	VA	23455
FACILITY LOCATION	645 Firefall Dr, Virginia Beach, VA 23454		

VA0081248	001
PERMIT NUMBER	DISCHARGE NUMBER

Virginia Beach VA 23462

FROM

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX.	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
001 FLOW	REPORTD				*****	*****	*****				
	REQRMNT	54	NL	MGD	*****	*****	*****			CONT	REC
002 PH	REPORTD	*****	*****			*****					
	REQRMNT	*****	*****		6.0	*****	9.0	SU		1/DAY	GRAB
003 BOD5	REPORTD				*****						
	REQRMNT	6132	9198	KG/D	*****	30	45	MG/L		3D/W	24HC
004 TSS	REPORTD				*****						
	REQRMNT	6132	9198	KG/D	*****	30	45	MG/L		3D/W	24HC
005 CL2, TOTAL	REPORTD	*****	*****		*****						
	REQRMNT	*****	*****		*****	2.5	4.0	MG/L		1/2H	GRAB
006 COLIFORM, FECAL	REPORTD	*****	*****		*****		*****				
	REQRMNT	*****	*****		*****	200	*****	N/CML		1/W	GRAB
140 ENTEROCOCCI	REPORTD	*****	*****		*****		*****				
	REQRMNT	*****	*****		*****	35	*****	N/CML		2/M	GRAB
157 CL2, TOTAL CONTACT	REPORTD					*****	*****				
	REQRMNT	*****	*****		1.0	*****	*****	MG/L	36	1/2H	GRAB

BYPASSES AND OVERFLOWS	TOTAL OCCURRENCES	TOTAL FLOW(M.G.)	TOTAL BOD5(K.G.)	OPERATOR IN RESPONSIBLE CHARGE			DATE		
I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS TO THE BEST OF MY KNOWLEDGE AND BELIEF TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.				TYPED OR PRINTED NAME	SIGNATURE	CERTIFICATE NO.	YEAR	MO.	DAY
				PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT		TELEPHONE			
				TYPED OR PRINTED NAME	SIGNATURE		YEAR	MO.	DAY

This report is required by your VPDES permit and by law. (See, e.g., the Code of Virginia of 1950 §62.1-44.5 and 9 VAC 25-31-50.) Failure to report or failure to report truthfully can result in civil penalties of \$32,500 per violation, per day and felony prosecutions which can carry a 15 year term.

DISCHARGE MONITORING REPORT (DMR) - GENERAL INSTRUCTIONS

1. Complete this form in permanent ink or indelible pencil. The use of 'correction fluid/tape' is not allowed.
2. Be sure to enter the dates for the first and last day of the period covered by the report on the form in the space marked "Monitoring Period".
3. For those parameters where the "permit requirement" spaces have a requirement or limitation, provide data in the "reported" spaces in accordance with your permit.
4. Enter the average and maximum quantities and units in the "reported" spaces in the columns marked "Quantity or Loading".
 $\text{KG/DAY} = \text{Concentration (mg/L)} \times \text{Flow (MGD)} \times 3.785$ $\text{G/D (Grams/Day)} = \text{Concentration (mg/L)} \times \text{Flow (MGD)} \times 3785$
5. Enter maximum, minimum, and/or average concentrations and units in the "reported" spaces in the columns marked "Quality or Concentration".
6. For all parameters enter the number of samples which do not comply with the maximum and/or minimum permit requirements in the "reported" space in the column marked "No. Ex." (Number of Exceedances). If none, enter "0". Do NOT include monthly average violations in this field. Include any Maximum 7-Day Average and Maximum Weekly Average violations in this field. Permittees with continuous pH, or temperature monitoring requirements should consult the permit for what constitutes an exceedance and report accordingly.
7. You are required to sample (at a minimum) according to the Sample Frequencies and Sample Types specified in your permit.
8. Enter the actual frequency of analysis for each parameter (number of times per day, week, month, etc.) in the "reported" space in the column marked "Frequency of Analysis".
9. Enter the actual type of sample (Grab, 8HC, 24HC, etc) collected for each parameter in the "reported" space in the column marked "Sample Type".
10. Enter additional required data or comments in the space marked "additional permit requirements or comments". If additional required data or comments are appended to the DMR, reference appended correspondence in this field.
11. Record the number of bypasses during the month, the total flow in million gallons (MG) and BOD5 in kilograms (KG) in the proper columns in the section marked "Bypasses and Overflows".
12. The operator in responsible charge of the facility should review the form and sign in the space provided. If the plant is required to have a licensed operator or if the operator in responsible charge of the facility is a licensed operator, the operator's signature and certificate number must be reported in the spaces provided.
13. The principal executive officer then reviews the form and must sign in the space provided and provide a telephone number where he/she can be reached. Every page of the DMR must have an original signature.
14. Send the completed form(s) with original signatures to your Department of Environmental Quality Regional Office by the 10th of each month unless otherwise specified in the permit.
15. You are required to retain a copy of the report for your records.
16. Where violations of permit requirements are reported, attach a brief explanation in accordance with the permit requirements describing causes and corrective actions taken. Reference each separate violation by date.
17. If you have any questions, contact the Department of Environmental Quality Regional Office listed on the DMR.